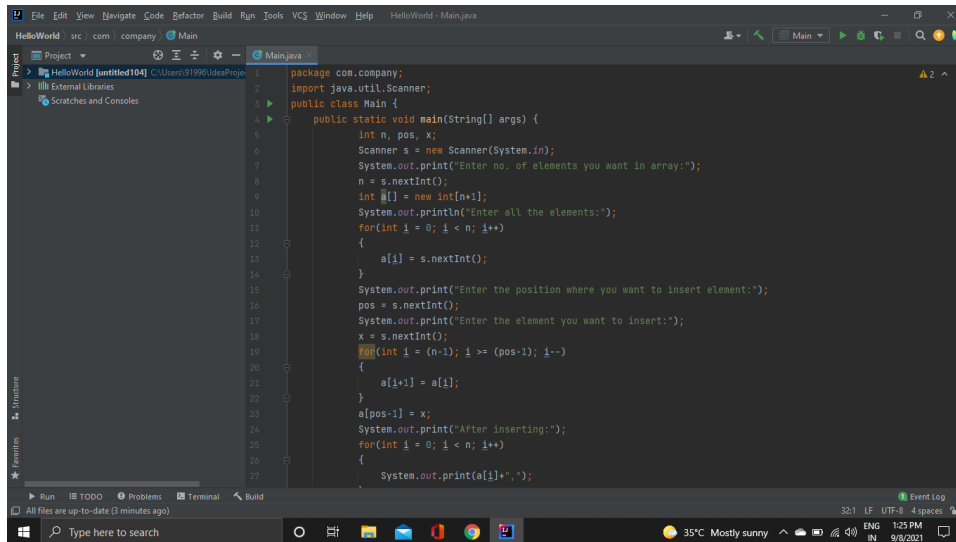
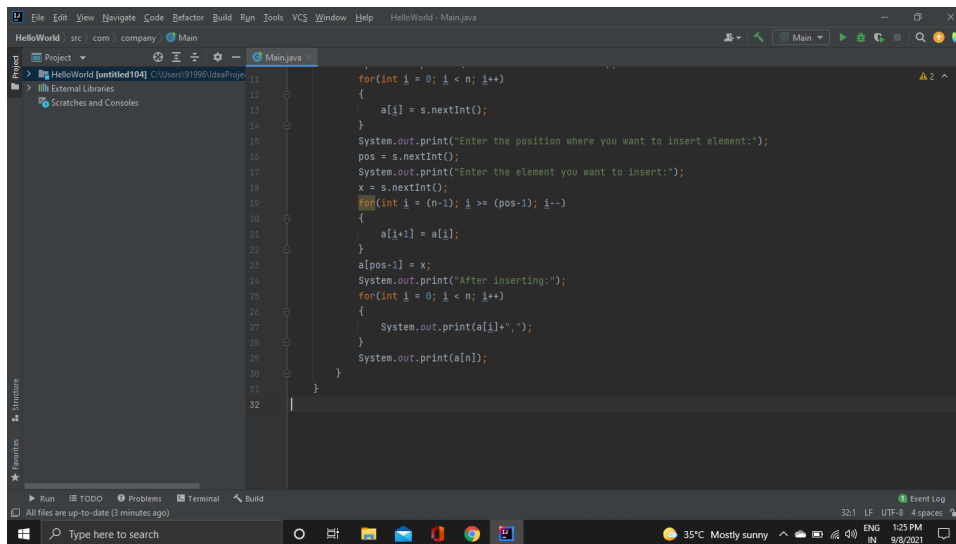


1. Program to insert an element in a specified position in a given Array ?

PROGRAM :

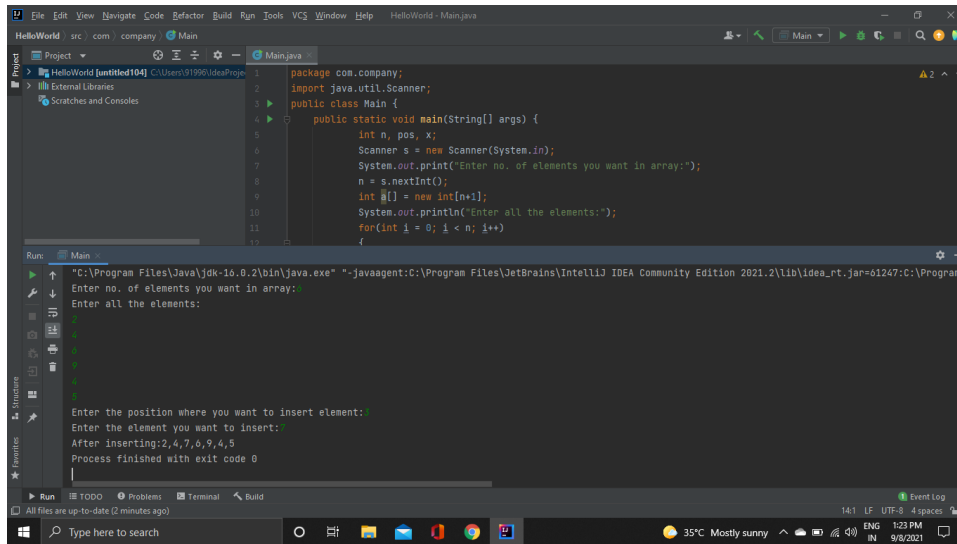


```
package com.company;
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        int n, pos, x;
        Scanner s = new Scanner(System.in);
        System.out.print("Enter no. of elements in array:");
        n = s.nextInt();
        int a[] = new int[n+1];
        System.out.println("Enter all the elements:");
        for(int i = 0; i < n; i++)
        {
            a[i] = s.nextInt();
        }
        System.out.print("Enter the position where you want to insert element:");
        pos = s.nextInt();
        System.out.print("Enter the element you want to insert:");
        x = s.nextInt();
        for(int i = (n-1); i >= (pos-1); i--)
        {
            a[i+1] = a[i];
        }
        a[pos-1] = x;
        System.out.print("After inserting:");
        for(int i = 0; i < n; i++)
        {
            System.out.print(a[i]+",");
        }
    }
}
```



```
for(int i = 0; i < n; i++)
{
    a[i] = s.nextInt();
}
System.out.print("Enter the position where you want to insert element:");
pos = s.nextInt();
System.out.print("Enter the element you want to insert:");
x = s.nextInt();
for(int i = (n-1); i >= (pos-1); i--)
{
    a[i+1] = a[i];
}
a[pos-1] = x;
System.out.print("After inserting:");
for(int i = 0; i < n; i++)
{
    System.out.print(a[i]+",");
}
System.out.print(a[n]);
}
```

OUTPUT :



```
package com.company;
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        int n, pos, x;
        Scanner s = new Scanner(System.in);
        System.out.print("Enter no. of elements you want in array:");
        n = s.nextInt();
        int a[] = new int[n+1];
        System.out.println("Enter all the elements:");
        for(int i = 0; i < n; i++)
        {
            a[i] = s.nextInt();
        }
        System.out.print("Enter the position where you want to insert element:");
        pos = s.nextInt();
        System.out.print("Enter the element you want to insert:");
        x = s.nextInt();
        for(int i = pos; i < n; i++)
        {
            a[i+1] = a[i];
        }
        a[pos] = x;
        System.out.println("After inserting:");
        for(int i = 0; i < n+1; i++)
        {
            System.out.print(a[i] + " ");
        }
        System.out.println();
    }
}
```

Run: Main

"C:\Program Files\Java\jdk-10.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\lib\idea_rt.jar=61247:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\bin" -Didea.config.path=C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\conf -Didea.copyright.path=C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\copyright -Didea.home.path=C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\bin -Didea.platform.prefix=JDK -Didea.vendor.id=jetbrains -Didea.version=2021.2 -jar C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\bin\idea_rt.jar 61247

Enter no. of elements you want in array: 2

Enter all the elements: 4 7 6 9 4 5

Enter the position where you want to insert element: 2

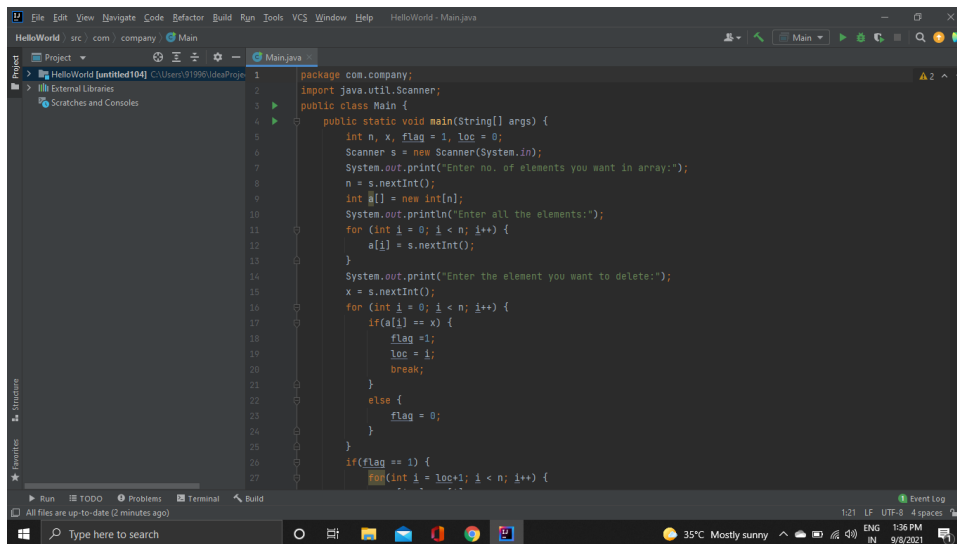
Enter the element you want to insert: 5

After inserting: 2 4 7 6 9 4 5

Process finished with exit code 0

2. Program to delete an element in a specified position in a given Array ?

PROGRAM :



```
package com.company;
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        int n, x, flag = 1, loc = 0;
        Scanner s = new Scanner(System.in);
        System.out.print("Enter no. of elements you want in array:");
        n = s.nextInt();
        int a[] = new int[n];
        System.out.println("Enter all the elements:");
        for (int i = 0; i < n; i++) {
            a[i] = s.nextInt();
        }
        System.out.print("Enter the element you want to delete:");
        x = s.nextInt();
        for (int i = 0; i < n; i++) {
            if(a[i] == x) {
                flag = 1;
                loc = i;
                break;
            }
            else {
                flag = 0;
            }
        }
        if(flag == 1) {
            for(int i = loc+1; i < n; i++) {
                a[i-1] = a[i];
            }
        }
        System.out.println("After deleting:");
        for(int i = 0; i < n; i++) {
            System.out.print(a[i] + " ");
        }
        System.out.println();
    }
}
```

Run: Main

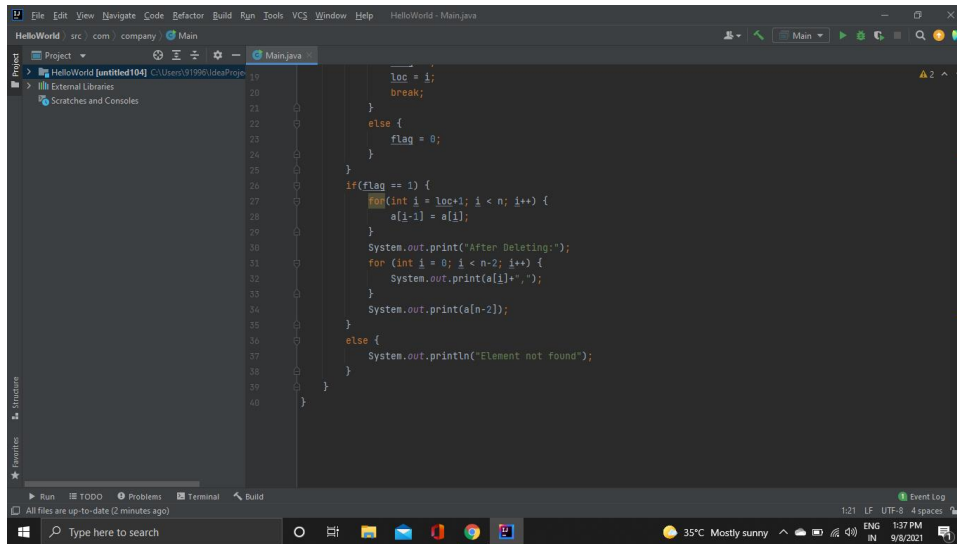
"C:\Program Files\Java\jdk-10.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\lib\idea_rt.jar=61247:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\bin" -Didea.config.path=C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\conf -Didea.copyright.path=C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\copyright -Didea.home.path=C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\bin -Didea.platform.prefix=JDK -Didea.vendor.id=jetbrains -Didea.version=2021.2 -jar C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\bin\idea_rt.jar 61247

Enter no. of elements you want in array: 2

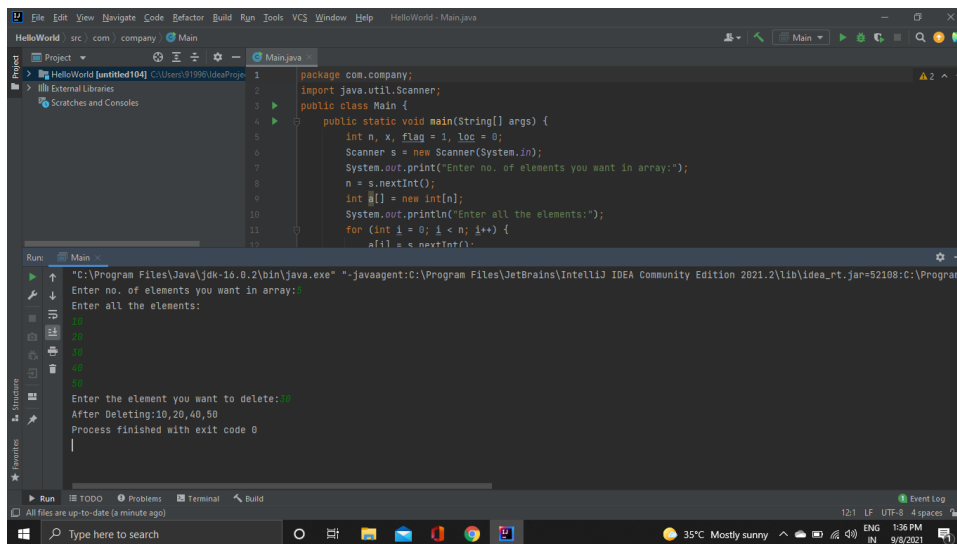
Enter all the elements: 4 7 6 9 4 5

Enter the element you want to delete: 4

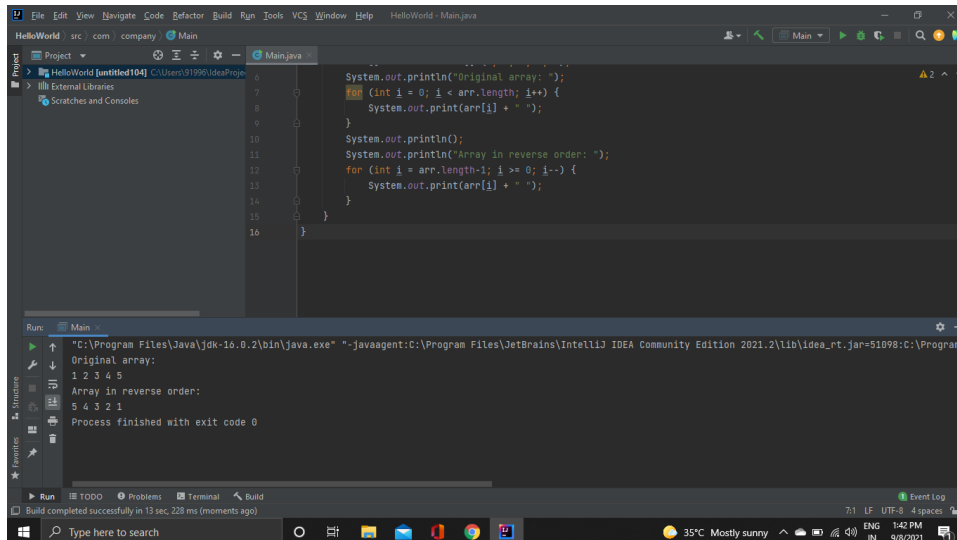
After deleting: 4 7 6 9 4



OUTPUT :

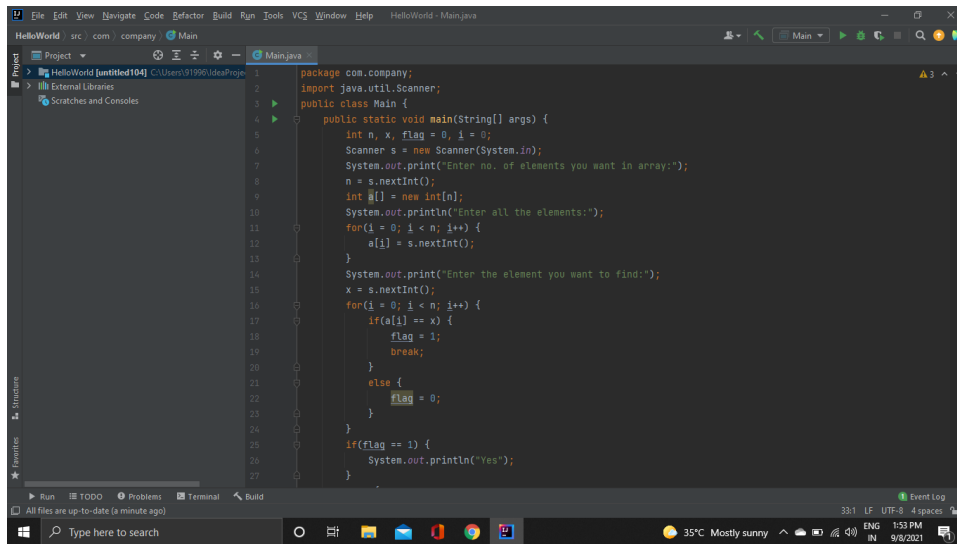


PROGRAM :

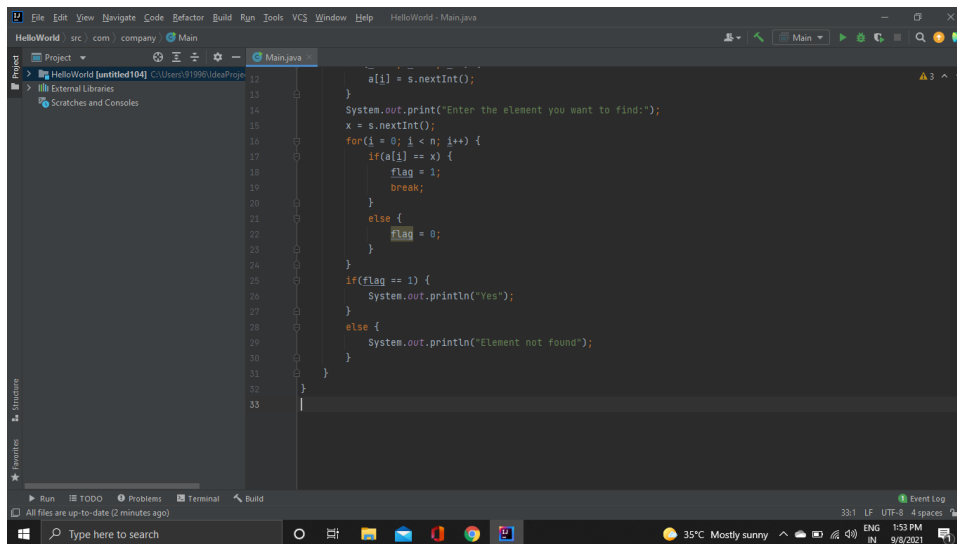


4. Program to search for an element in an Array ?

PROGRAM :



```
1 package com.company;
2 import java.util.Scanner;
3 public class Main {
4     public static void main(String[] args) {
5         int n, x, flag = 0, i = 0;
6         Scanner s = new Scanner(System.in);
7         System.out.print("Enter no. of elements you want in array:");
8         n = s.nextInt();
9         int a[] = new int[n];
10        System.out.println("Enter all the elements:");
11        for(i = 0; i < n; i++) {
12            a[i] = s.nextInt();
13        }
14        System.out.print("Enter the element you want to find:");
15        x = s.nextInt();
16        for(i = 0; i < n; i++) {
17            if(a[i] == x) {
18                flag = 1;
19                break;
20            }
21            else {
22                flag = 0;
23            }
24        }
25        if(flag == 1) {
26            System.out.println("Yes");
27        }
28    }
29 }
```



```
17        a[i] = s.nextInt();
18    }
19    System.out.print("Enter the element you want to find:");
20    x = s.nextInt();
21    for(i = 0; i < n; i++) {
22        if(a[i] == x) {
23            flag = 1;
24            break;
25        }
26        else {
27            flag = 0;
28        }
29    }
30    if(flag == 1) {
31        System.out.println("Yes");
32    }
33    else {
34        System.out.println("Element not found");
35    }
36 }
```

OUTPUT :

